

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2003/000690

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H04L 27/26

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H04L, H04Q, H04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ, INSPEC, XPI3E

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003142764 A1 (PETER A. KEEVILL ET AL), 31 July 2003 (31.07.2003), figures 36,37, see sections[0240-0248]  --	1-20
A	EP 0903898 A2 (SAMSUNG ELECTRONICS CO., LTD.), 24 March 1999 (24.03.1999), page 4, column 6, line 36 - page 5, column 7, line 17, abstract  --	1-20
A	US 6470030 B1 (JAE HYEOK PARK ET AL), 22 October 2002 (22.10.2002), figures 7,12  --	1-20

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

24 February 2004

Date of mailing of the international search report

27 -02- 2004

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Michael Speth et al "Optimum Receiver design for OFDM-Based Broadband Transmission-Part II: A Case Study" IEEE TRANSACTIONS ON COMMUNICATIONS, Vol. 49, No. 4, April 2001. See abstract  --	1-20
E,X	Ludwig Schwoerer et al "Fast Scattered Pilot Synchronization for DVB-T and DVB-H" Proc. 8th International OFDM Workshop, Hamburg, Germany, 24-25 Sept. 2003. See the whole document  -- -----	1-20

# INTERNATIONAL SEARCH REPORT

Information on patent family members

24/12/2003

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US	2003142764	A1	31/07/2003	TW	465234 B	00/00/0000
				US	6359938 B	19/03/2002
				US	5953311 A	14/09/1999
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EP	0903898	A2	24/03/1999	CN	1110148 B	28/05/2003
				CN	1209001 A	24/02/1999
				JP	11163771 A	18/06/1999
				KR	160557 Y	15/11/1999
				KR	224863 B	15/10/1999
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US	6470030	B1	22/10/2002	EP	1070400 A	24/01/2001
				JP	2002513242 T	08/05/2002
				WO	9956424 A	04/11/1999
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